Paper No. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GOURAB MAJUMDAR, SHINJI HATAE, TATSUO OOTA,
and MASANORI FUKUNAGA

Appeal No. 1999-1651
Application No. 08/775,308

ON BRIEF

Before JERRY SMITH, FLEMING, and DIXON, **Administrative Patent Judges**.

DIXON, **Administrative Patent Judge**.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 41-45, which are all of the claims pending in this application.

We REVERSE.

BACKGROUND

The appellants' invention relates to a controller for power device and drive controller for motor. An understanding of the invention can be derived from a reading of exemplary claim 41, which is reproduced below.

41. A semiconductor device comprising:

a support member having an upper surface and a lower portion;

at least one power device;

at least one control element for controlling said at least one power device;

a plurality of first terminals each having a first end and a second end, at least one first end electrically connected to said at least one power device;

a plurality of second terminals each having a first end and a second end, the first ends electrically connected to said at least one control element;

a heat sink having one major surface, said heat sink disposed on the lower portion of said support member;

a package comprising an upper package portion joined with said support member;

said at least one power device, said at least one control element, and the first ends of said first and second terminals arranged on the upper surface of said support member;

said package sealing said at least one power device, said at least one control element, and said first ends of said first and second terminals; and

said first and second terminals respectively protruding from first and second sides of said package.

The prior art of record relied upon by the examiner in rejecting the appealed claims is as follows:

Sugishima et al. (Sugishima)	5,497,289	Mar. 5, 1989

Claims 41-45 stand rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most connected, to make and/or use the invention. The examiner references an objection to the specification under 37 CFR 1.71 which maintains that the original specification does not describe all of the subject matter contained in the claims.[1] Claims 41-45 stand rejected under 35 U.S.C. § 103 as being unpatentable over Sugishima.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the examiner's final rejection and answer and appellants' briefs for the examiner's and appellants' positions and arguments.

OPINION

[1] While we cannot render an opinion on the objection to the specification based upon 37 CFR 1.71, we interpret this objection to also be an objection to the specification under 35 U.S.C. § 112, first paragraph upon which the rejection of the claims is based.

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art reference, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

35 U.S.C. § 112, FIRST PARAGRAPH

At the outset, we note that the examiner's position with respect to this rejection has not been thoroughly understood by appellants or the Board. With this said, we note that even if read with great latitude and deference to the examiner, we still do not find that the examiner has made a sufficient showing to support a reasonable basis for a rejection under 35 U.S.C. § 112, first paragraph.

Furthermore, we note that the examiner has based the rejection upon only the enablement portion of the statute in the final rejection, and we address the arguments thereto. In the examiner's answer at pages 4-5, the examiner does argue at length a lack of disclosure of the best mode, but the examiner did not set forth best mode as a grounds of rejection. Argument thereto is moot since the examiner merely incorporated the rejection set forth in paper number 9 and has not set forth a new ground of rejection in the answer. (See answer at page 3.)

Also, if the examiner intended to make a rejection under the written description portion or the statute, the examiner has not adequately identified and set forth such

basis for the rejection in the final rejection or in the answer. Therefore, we limit our review solely to enablement under 35 U.S.C. § 112, first paragraph.

While we agree with the examiner that the specification, as filed, does not shimmer with clarity as to assist the examiner in evaluating whether appellants had complied with any or all three portions of 35 U.S.C. § 112, first paragraph, we find that the examiner has not established a ***prima facie*** case of a lack of enablement. We find that the specification is quite sparse in its written description of the packaging of the circuits disclosed throughout the specification, but when taken in combination with the drawings (especially Fig. 23), the brief description of the figures section of the disclosure and appellants' identification of support, it is our reasoned opinion that the disclosure, as originally filed, would have been sufficient to enable one skilled in the art to make and use the claimed invention. In essence, the claimed invention is not an overly specific claimed invention nor highly technical invention which would have required a great deal of detailed disclosure, and the skilled artisan would merely have to look to the language of the claims to enable a physical orientation and configuration of elements in the claimed manner to practice the invention. But, the rejection is based upon a lack of support in the disclosure which underlies the claimed invention. Here, the originally filed disclosure includes both the written description and the drawings which must enable the skilled artisan to make and/or use the claimed invention.

From our review of the specification, as originally filed, we note that no claim to the instant claimed invention was filed and the original abstract did not include any disclosure of the packaging embodiments, therefore it is merely the original specification and drawings which must provide support for enablement. As discussed above, we find that the invention as claimed would have been enabled by the language of the claim alone due the nature of the claimed invention and that the language of the claim is supported by the originally filed specification and Figure 23 which includes all of the limitations as recited in the language of claim 41 with respect to the use of "at least one" used in a number of limitations.

Appellants go on at length to show support for each of the recited claim limitations in the brief at pages 6-13. We agree with appellants that there is support for the limitations as claimed. Appellants argue that the written disclosure and the drawings must be taken as a whole to determine if appellants had possession of the invention at the time of filing. (See brief at page 7.) We agree with appellants. Appellants further argue that multiple embodiments may be relied upon in combination to provide support for the invention as claimed with respect to written description requirement. We agree with appellants, but note that the reliance upon multiple

embodiments may also evidence a lack of realization that portions of an invention may be combined for a new or different invention which appellants did not have in his possession at the time of filing. Here, we agree with the appellants that appellants did have the invention as claimed in his possession at the time of filing.

Specifically, the examiner stated that the limitation "plurality of first terminals each having a first end and a second end, at least one first end electrically connected to said at least one power device" was not supported by the specification. (See final rejection at page 3, line 1.) Appellants argue that the "specification as a whole conveys to a person of ordinary skill in the art that the above limitation is part of what Applicants

intended to invent at the time of filling [sic]." (See brief at page 9.) (Emphasis added.) We agree with appellants that the specification as a whole may provide support, but we disagree with appellants that it does not extend to what appellants intended, but only what appellants did invent and disclose. Appellants may have intended many things, but did not adequately disclose them. It is the disclosure itself and not the intent to disclose which we evaluate. Here, the language of claim 41 requires "a plurality of first terminals each having a first end and a second end, at least one first end electrically connected to said at least one power device." Here, we agree with appellants that

Figure 23 discloses a plurality of first terminals each having a first end and a second end, and that at least one first end is electrically connected to said at least one power device as recited in the language of claim 41.

The examiner argues that the diagrams in Figure 23 are inadequately taught and that there is no support member and no common structure to fit the diagrams together. (See answer at page 3.) We disagree with the examiner. While Figure 23 is only briefly labeled, it is clear that there is support for the claimed invention, and the linkage between the diagrams would appear to be the hidden lines that show the heat sink under the support which holds the chips 2200 and 2100. The examiner further questions whether there is a package that seals the heat sink, power device, control element, and the terminals. (See answer at page 3.) Here, we disagree with the examiner's claim interpretation. The heat sink is on the lower portion of the support and the other elements are on the upper surface which is sealed. We find that Fig. 23 discloses this claimed feature with one end of the terminals within the sealed area. The examiner maintains that various embodiments cannot be intermingled. (See brief at page 3.) We disagree with the examiner's generalization. In many instances the skilled artisan must look to the disclosure as a whole since there is not a need to

re-disclose duplicative subject matter. Here, the prior packaging disclosure discusses encapsulating the circuitry (specification at page 45) then Fig. 23 shows an encapsulated packaging with upper package OP10 without the use of the terminology "encapsulation." In our view, the upper package would similarly encapsulate/seal the circuitry since foreign matter therein would seriously degrade operation.

Finally, the examiner suggests the rewriting of the packaging sections of the specification in "a more clear and cogent fashion." (See answer at pages 3-4.) While this may be quite useful, we find that, as originally filed, the disclosure is sufficient to meet the enablement requirement of 35 U.S.C. § 112, first paragraph and we will not sustain the rejection under 35 U.S.C. § 112, first paragraph.

35 U.S.C. § 103

Similarly with respect to the showing for the rejection under 35 U.S.C. § 103[2], we find that the examiner has not made a ***prima facie*** case of obviousness. Specifically, appellants argue that the language of claim 41 requires that the "power device, the control element and the one end of the first and second terminals be arranged on the upper surface of said support member." (See brief at page 17.) Appellants direct

[2] We agree with appellants that the examiner's rejection of claims 19-23, which were canceled in actuality was directed to pending claims 41-45.

attention to column 1, lines 15-16 of Sugishima. We agree with appellants. The examiner maintains that "the heat sink 70 is [on] one side of circuit board 74 and power supply 71 is on the opposite side of circuit board 74. . . . The important idea is that they are on opposing sides of the circuit board." (Answer, page 5.) In our view, Sugishima clearly discloses that the heat sink is connected directly to the power device and the circuit board is on the opposite side of the power device. Therefore, these devices are not on the upper surface of the support member and the heat sink on the lower portion of the support member. Contrary to the examiner position that package may be mounted upside down, the prior art still would not meet the relative orientation as set forth in claim 41. Therefore, the examiner has not set forth a ***prima facie*** case of obviousness, and we cannot sustain the rejection of claim 41 and its dependent claims 42-45.

CONCLUSION

To summarize, the decision of the examiner to reject claims 41-45 under 35 U.S.C. § 112, first paragraph is reversed, and the decision of the examiner to reject claims 41-45 under 35 U.S.C. § 103 is reversed.

REVERSED

JERRY SMITH Administrative Patent Judge	)))))) BOARD OF PATENT
MICHAEL R. FLEMING Administrative Patent Judge	) APPEALS) AND) INTERFERENCES
JOSEPH L. DIXON Administrative Patent Judge	))))

jld/vsh

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